

ABSTRACT

The invention refers to a ranging system for determining ranging information of a spacecraft carrying a component of a communication channel. In order to provide a ranging system for determining ranging information of a satellite carrying a transponder as well as to provide a method thereof which yield a sufficient accuracy without causing further costs when narrow spot beams by the transponder are used, a ranging system according to the invention comprises a plurality of receiving stations at different locations on earth, wherein each receiving station is arranged for receiving a reference signal from said component; synchronisation means for providing a synchronised time base between the plurality of receiving stations; calculation means for calculating said ranging information in accordance with the propagation time of each received reference signal and with the synchronised time base; wherein at least one receiving station comprises a correlation receiver for receiving the reference signal.